

Appl. No. 09/661,992
Amdt. dated October 8, 2003
Preliminary Amendment

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (original) An antibody or antibody derivative against factor IX/factor IXa which increases the procoagulant activity of FIXa.
2. (original) An antibody or antibody derivative according to claim 1, wherein said antibody or antibody derivative increases the procoagulant activity of FIXa in the presence of FVIII inhibitors.
3. (original) An antibody according to any one of claim 1 wherein said antibody is selected from the group consisting of IgG, IgM, IgA and IgE antibodies.
4. (original) An antibody or antibody derivative according to claim 1, wherein said antibody or antibody derivative is selected from the group consisting of monoclonal antibodies, antibody fragments, chimeric antibodies, humanized antibodies, single chain antibodies, bispecific antibodies, diabodies, and di-, oligo- or multimers thereof.
5. (original) An antibody derivative according to claim 1, wherein said antibody derivative comprises a complement determining region (CDR) peptide.
6. (original) An antibody derivative according to claim 5, wherein said CDR peptide is a CDR3 peptide.
7. (original) An antibody derivative according to claim 6, wherein said CDR3 peptide comprises an amino acid sequence selected from the group consisting of:

Tyr-Gly-Asn-Ser-Pro-Lys-Gly-Phe-Ala-Tyr;

Cys-X-X-Tyr-Gly-Asn-Ser-Pro-Lys-Gly-Phe-Ala-Tyr-X-X-Cys, wherein X may be any desired amino acid;

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Tyr-Gly-Asn-Ser-Pro-Lys-Gly-Phe-Ala-Tyr;

Asp-Gly-Gly-His-Gly-Tyr-Gly-Ser-Ser-Phe-Asp-Tyr; and

Phe-Arg-Asn-Arg-Gly-Met-Thr-Ala-Leu-Leu-Lys-Val-Ser-Ser-Cys-Asp.

8. (currently amended) An antibody or antibody derivative according to claim 1, wherein the variable region of said antibody or antibody derivative comprises amino acids ~~1 to 357~~ 1-119 and/or amino acids ~~403 to 726~~ according to Fig. 14 135-242 as listed in SEQ ID NO:82.

9. (original) An antibody or antibody derivative according to claim 8, wherein said antibody or antibody derivative additionally comprises an artificial linker sequence.

10. (currently amended) An antibody or antibody derivative according to claim 1, wherein the variable region of said antibody or antibody derivative comprises amino acids ~~1 to 363~~ 1-121 and/or amino acids ~~409 to 747~~ according to Fig. 15 137-249 as listed in SEQ ID NO:84.

11. (currently amended) An antibody or antibody derivative according to claim 10, wherein said antibody or antibody derivative additionally comprises an ~~artificial~~ artificial linker sequence.

12. (currently amended) An antibody or antibody derivative according to claim 1, ~~[[,]]~~ wherein the variable region of said antibody or antibody derivative comprises amino acids ~~1 to 366~~ 1-122 and/or amino acids ~~412 to 747~~ according to Fig. 16 138-249 as listed in SEQ ID NO:86.

13. (original) An antibody or antibody derivative according to claim 12, wherein said antibody or antibody derivative additionally comprises an artificial linker sequence.

14. (original) A hybridoma cell line expressing an antibody or antibody derivative against factor IX/factor IXa according to claim 1.

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15. (currently amended) A hybridoma cell line according to claim 14, wherein said cell line is selected from the group consisting of ~~#196/AF1, #196/AF2, #193/AD3, #193/K2-1, #198/AC1/1, #198/AM1, #198/A1, #198/B1, #198/AP1, 198/A1, 198/B1, 198/BB1, 198/A1, 198/B1, 198/BB1~~ cell lines having ECACC deposit numbers 99090924, 99090925, 99090926, 99121614, 99121615, 99121616, 99121617, 99121618, 99121619 and 99121620.

16. (original) An antibody or antibody derivative according to claim 1, which is expressed by a hybridoma cell line according to claim 14.

17. (canceled)

18. (original) A pharmaceutical preparation comprising an antibody or antibody derivative according to claim 1 and a pharmaceutically acceptable carrier.

19. (original) A preparation according to claim 18, additionally comprising factor IX α and/or factor IX α β .

20-22. (canceled)

23. (currently amended) A method of obtaining an antibody or antibody derivative which ~~intereacts~~ interacts with factor IX/factor ~~Ixa~~ IXa and increases the procoagulant activity of Factor IXa, comprising the steps of:

[[-]] immunizing an immunocompetent mouse with an antigen selected from the group consisting of FIX, FIX α , FIX α β or fragments thereof,

[[-]] isolating spleen cells of the immunized mouse,

[[-]] producing hybridoma clones,

[[-]] screening the hybridoma cell supernatants for an increase in the procoagulant activity of Factor ~~Ixa~~, ~~isolating~~ IXa, isolating and purifying the antibodies or

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antibody derivatives from hybridoma cell supernatants which exhibit an increase in the procoagulant activity of factor IXa.

24. (cancel)
25. (new) An antibody derivative according to claim 4, which is an antibody fragment.
26. (new) An antibody derivative according to claim 4, which is a single chain antibody.
27. (new) An antibody derivative according to claim 4, which is a humanized antibody.